UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

20277

7590

03/10/2004

MCDERMOTT WILL & EMERY 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096

EXAMINER HELLNER, MARK

> ART UNIT PAPER NUMBER

3663

DATE MAILED: 03/10/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,633	11/20/2001	Soichi Endo	50212-312	8912

TITLE OF INVENTION: AMPLIFICATION OPTICAL FIBER AND FIBER OPTIC AMPLIFIER INCLUDING THE SAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	06/10/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450

(703) 746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for

maintenance fee notifications.

or <u>Fax</u>

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

20277

7590

03/10/2004

MCDERMOTT WILL & EMERY 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fec(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below.

(Depositor's name)		
(Signature		
(Date)		

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988 633	11/20/2001	Soichi Endo	50212-312	8912

TITLE OF INVENTION: AMPLIFICATION OPTICAL FIBER AND FIBER OPTIC AMPLIFIER INCLUDING THE SAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	06/10/2004
EXA	MINER	ART UNIT	CLASS-SUBCLASS		
HELLNI	ER, MARK	3663	359-341100	_	
CFR 1.363). Change of correspond Address form PTO/SB/1	ce address or indication of "F lence address (or Change of C 22) attached. ion (or "Fee Address" Indica or more recent) attached. Us	Correspondence	2. For printing on the patent front pay names of up to 3 registered patent agents OR, alternatively, (2) the name firm (having as a member a register agent) and the names of up to 2 reg attorneys or agents. If no name is list will be printed.	t attorneys or 1ne of a single ed attorney or 2;istered patent	

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (B) RESIDENCE: (CITY and STATE OR COUNTRY)

(A) NAME OF ASSIGNEE

Please check the appropriate assignee category or cate	egories (will not be printed on the patent);	⊔ individual	☐ corporation or other private group entity	y 🗓 government
4a. The following fee(s) are enclosed:	4b. Payment of Fee(s):			
☐ Issue Fee	☐ A check in the amo	ount of the fee(s)	is enclosed.	
☐ Publication Fee	☐ Payment by credit	card. Form PTO-	2038 is attached.	
☐ Advance Order - # of Copies	☐ The Director is he Deposit Account Nur	ereby authorized	by charge the required fee(s), or credit an (enclose an extra copy of the	y overpayment, to is form).
Director for Patents is requested to apply the Issue Fe	e and Publication Fee (if any) or to re-apply	any previously p	aid issue fee to the application identified ab	ove.
(Authorized Signature)	(Date)	==		
NOTE; The Issue Fee and Publication Fee (if req other than the applicant; a registered attorney or interest as shown by the records of the United States	uired) will not be accepted from anyone agent; or the assignee or other party in Patent and Trademark Office.			
This collection of information is required by 37 C obtain or retain a benefit by the public which is to application. Confidentiality is governed by 35 U.S. 0 estimated to take 12 minutes to complete, including completed application form to the USPTO. Time case. Any comments on the amount of time yo suggestions for reducing this burden, should be sepatent and Trademark Office, U.S. Departmer 22313-1450. DO NOT SEND FEES OR COMP SEND TO: Commissioner for Patents, Alexandria, V.	o file (and by the USPTO to process) and 2. 122 and 37 CFR 1.14. This collection is gathering, preparing, and submitting the will vary depending upon the individual unrequire to complete this form and/or not to the Chief Information Officer, U.S. to of Commerce, Alexandria, Virginia LETED FORMS TO THIS ADDRESS.			
Under the Paperwork Reduction Act of 1995, n collection of information unless it displays a valid O	o persons are required to respond to a MB control number.			



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

APPLICATION NO.	Fil	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,633	1	1/20/2001	Soichi Endo	50212-312	8912
20277	7590	03/10/2004		EXAM	INER
MCDERMOT				HELLNEI	R, MARK
600 13TH STRI WASHINGTON	,			ART UNIT	PAPER NUMBER
WASHINGTO	1, DC 2000	J3-3090		3663	

DATE MAILED: 03/10/2004

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 415 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 415 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

er 36 cover sheet with the corre NS) CLOSED in this application will application is subject to with 1308. r. C. § 119(a)-(d) or (f). ed. ed in Application No e been received in this national polication.	ation. If not included be mailed in due course. THIS the the initiative the initiative shape application from the initiative the initiative shape application from the initiative shape
er 36 cover sheet with the corre NS) CLOSED in this application will application is subject to wit 1308. r. C. § 119(a)-(d) or (f). ed. ed in Application No e been received in this nation unication to file a reply compapplication.	spondence address ation. If not included the mailed in due course. THIS therefore at the initiative therefore address ation. If not included the mailed in due course. THIS therefore at the initiative therefore address ation. If not included the mailed in due course. THIS therefore address ation. If not included the mailed in due course. THIS therefore address ation. If not included therefore address
cover sheet with the corrends) CLOSED in this application will application is subject to with 1308. T. C. § 119(a)-(d) or (f). ed. ed in Application No e been received in this national polication.	spondence address ation. If not included be mailed in due course. THIS thdrawal from issue at the initiative onal stage application from the applying with the requirements
NS) CLOSED in this application will application is subject to will 1308. r. C. § 119(a)-(d) or (f). ed. ed in Application No e been received in this national interestion in the subject to will application.	ation. If not included be mailed in due course. THIS the thorawal from issue at the initiative on the initiative of the
c. § 119(a)-(d) or (f). ed. ed in Application No. e been received in this nation in the control of the control	onal stage application from the requirements
c. § 119(a)-(d) or (f). ed. ed in Application No. e been received in this nation in the control of the control	onal stage application from the requirements
c. § 119(a)-(d) or (f). ed. ed in Application No. e been received in this nation in the control of the control	onal stage application from the requirements
ed. ed in Application No. e been received in this nation unication to file a reply comapplication.	onal stage application from the requirements
why the oath or declaration ed. Drawing Review (PTO-948 of / Comment or in the Office of the written on the drawings cording to 37 CFR 1.121(d). DGICAL MATERIAL must proper to the property of the propert) attached e action of in the front (not the back) of t be submitted. Note the
☐ Interview Summary (PT	O-413), t/Comment
	5. ☐ Notice of Informal Pater 6. ☐ Interview Summary (PT Paper No./Mail Date _ 7. ☐ Examiner's Amendmen 8. ☐ Examiner's Statement of

Application/Control Number: 09/988,633

Art Unit: 3663

DETAILED ACTION

The following is an examiner's statement of reasons for allowance: The closest prior art to claims 1-16 is Kubo et al. This reference teaches a Raman fiber that has a zero dispersion wavelength in the range of 1.35 to 1.44 nm and a cut-off wavelength of less than 1.368 nm. Raman pumping wavelengths would inherently be less than the S band. There is no teaching or suggestion of a core region doped with a rare earth element. Claims 1, 6 and 11 include a core region doped with a rare earth element and, as such, are patentable over Kubo et al. Claims 2-5, 7-10 and 12-16 are dependent on claims 1, 6 and 11. It is also noted that Kubo et al has a publication date after the priority date of the present application.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication should be directed to Mark Hellner at telephone number 703 306 4155.

Mark Hellner

March 6, 2004

MARKHELLNER PRIMARY EXAMINER

----3663

Mark Hellen